

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

HEA-JEUNG LEE

Serial No.: *to be assigned*

Examiner: *to be assigned*

Filed: 15 January 2004

Art Unit: *to be assigned*

For: KEY SIGNAL SCANNING APPARATUS OF COMPLEX TELEPHONE

INFORMATION DISCLOSURE STATEMENT

Mail Stop Patent Application

Commissioner for Patents

P.O.Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §1.56, and §§1.97 and 1.98 as amended, Applicant cites, describes, and provides copies of the following art references:

1. U.S. Patent No. 6,563,434 to Olodort *et al.*, entitled *SYSTEM AND METHOD FOR DETECTING KEY ACTUATION IN A KEYBOARD*, issued on May 13, 2003;
2. U.S. Patent No. 5,266,950 to Gulick *et al.*, entitled *PROGRAMMABLE KEYPAD MONITOR*, issued on November 30, 1993;
3. U.S. Patent No. 5,235,635 to Gulick, entitled *KEYPAD MONITOR WITH KEYPAD ACTIVITY-BASED ACTIVATION*, issued on August 10, 1993;
4. U.S. Patent No. 5,220,601 to Gulick *et al.*, entitled *KEYPAD STATUS REPORTING SYSTEM*, issued on June 15, 1993;
5. U.S. Patent No. 5,199,064 to Gulick *et al.*, entitled *FULLY-INTEGRATED TELEPHONE UNIT*, issued on March 30, 1993;
6. U.S. Patent No. 4,486,624 to Puhl *et al.*, entitled *MICROPROCESSOR*

- CONTROLLED RADIOTELEPHONE TRANSCEIVER*, issued on December 4, 1984;
7. U.S. Patent No. 4,998,275 to Braunstein *et al.*, entitled *MULTI-LINE TELEPHONE COMMUNICATIONS SYSTEM*, issued on March 5, 1991;
 8. U.S. Patent No. 4,954,823 to Binstead, entitled *TOUCH KEYBOARD SYSTEMS*, issued on September 4, 1990;
 9. U.S. Patent No. 4,860,339 to D'Agosto III *et al.*, entitled *PROGRAMMABLE TELEPHONE/DICTATION TERMINAL AND METHOD OF OPERATING SAME*, issued on August 22, 1989;
 10. U.S. Patent No. 4,675,653 to Priestley, entitled *KEYBOARD ARRANGEMENTS*, issued on June 23, 1987;
 11. U.S. Patent No. 4,488,006 to Essig *et al.*, entitled *APPARATUS FOR CONTROLLING THE APPLICATION OF TELEPHONE LINE POWER IN A TELEPHONE SET*, issued on December 11, 1984;
 12. U.S. Patent No. 4,467,140 to Fathauer *et al.*, entitled *MICROPROCESSOR-BASED CORDLESS TELEPHONE SYSTEM*, issued on August 21, 1984; and
 13. U.S. Patent No. 4,149,041 to Card *et al.*, entitled *TELEPHONE APPARATUS*, issued on April 10, 1979.

Olodort *et al.* '434 discloses a system and method for detecting key actuation in a keyboard assembly, which in one embodiment, is used as a conductor to electrically communicate with an information appliance.

Gulick *et al.* '950 discloses a keypad monitor implemented in an integrated circuit which monitors the closure of a plurality of keypad switches coupled to input terminals of the integrated circuit.

Gulick '635 discloses a keypad monitor which monitors the condition of a plurality of switches of a keypad, which is activated in response to receiving clock signals from an external clock source and is deactivated in the absence of the clock signals.

Gulick *et al.* '601 discloses a keypad status reporting system which provides an indication over a serial bus as to which switch of a plurality of keypad switches is being selected by an operator wherein each keypad switch is coupled between a respective different pair of row and column conductors.

Gulick *et al.* '064 relates to a fully-integrated telephone unit wherein a single integrated circuit forms a hands-free telephone unit for use in a digital telephone network and in association with an external keypad, an external microprocessors, an external microphone, and an external speaker.

Puhl *et al.* '624 discloses a radiotelephone transceiver which includes a unique microprocessor and peripheral devices for controlling the operation of portable or mobile radio transceivers in a cellular-type radiotelephone system.

Braunstein *et al.* '275 discloses a multi-line telephone communications system wherein the need for the hundreds of conductors that are necessary to connect each station to the control and switching equipment is eliminated.

Binstead '823 discloses touch keyboard systems wherein a display can be controlled through one or more thicknesses of glass and one or more air gaps using a transparent keypad through which the display can be observed.

D'Agosto III *et al.* '339 discloses a programmable telephone/dictation terminal that can be disposed in any one of several different modes of operation including, but not limited to, dictating information onto a recorder, communicating over a telephone network, recording incoming messages received via a telephone line, preventing a telephone dial out operation and communicating "text" messages with a supervisory console.

Priestley '653 discloses a keyboard arrangement for computer equipment in which the full set of keys is utilized for computing functions and has a restricted set of the full set of keys used for operating a telephony function.

Essig *et al.* '006 discloses an apparatus for controlling the application of telephone line power in a telephone set, which has obviated the requirement for a local source of power at the premises of

a telephone customer.

Fathauer *et al.* '140 relates to a cordless telephone system which includes a base unit operatively coupled to a user's telephone lines and a relatively compact portable cordless hand-set.

Card *et al.* '041 relates to a telephone control console which may be a subscriber's instrument or, preferably, a PABX operator's console.

The citation of the foregoing references is not intended to constitute an assertion that other or more relevant art does not exist. Accordingly, the Examiner is requested to make a wide-ranging and thorough search of the relevant art.

No fee is incurred by this Statement.

Respectfully submitted,



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INFORMATION DISCLOSURE STATEMENT PTO-1449 (PAGE 1 OF 1)	SERIAL NUMBER	DOCKET NO. P56928
	APPLICANT HEA-JEUNG LEE	
	FILING DATE 15 January 2004	GROUP

U.S. PATENT DOCUMENTS							
EXAMINER	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE	
	6,563,434	5/03	Olodort et al.				
	5,266,950	11/93	Gulick et al.				
	5,235,635	8/93	Gulick				
	5,220,601	6/93	Gulick et al.				
	5,199,064	3/93	Gulick et al.				
	4,486,624	12/84	Puhl et al.				
	4,998,275	3/91	Braunstein et al.				
	4,954,823	9/90	Binstead				
	4,860,339	8/89	D'Agosto III et al.				
	4,675,653	6/87	Priestley				
	4,488,006	12/84	Essig et al.				
	4,467,140	8/84	Fathauer et al.				
	4,149,041	4/79	Card et al.				
FOREIGN PATENT DOCUMENTS						TRANSLATION	
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)							
EXAMINER:			DATE CONSIDERED:				
<small>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</small>							